



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-0022; Project Identifier AD-2020-01264-A; Amendment 39-22033; AD 2022-09-13]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Piper Aircraft, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Piper Aircraft, Inc. (Piper) Model PA-34-200 airplanes. This AD was prompted by the determination that the life limit for alternate bolts that attach the drag link to the nose gear were not listed as airworthiness limitations. This AD requires establishing a life limit for these bolts. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, FL 32960; phone: (772) 299-2141; website: <https://www.piper.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

#### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0022; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West

Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Fred Caplan, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5507; email: frederick.n.caplan@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Piper Model PA-34-200 airplanes. The NPRM published in the *Federal Register* on February 3, 2022 (87 FR 6089; corrected February 16, 2022, 87 FR 8752). The NPRM was prompted by a notification from Piper that prior revisions of the airworthiness limitations section (ALS) for certain Piper Model PA-34-200 airplanes did not contain a life limit for bolt part number (P/N) 693-215 (standard P/N NAS6207-50D). Bolt P/N 693-215 (NAS6207-50D) is an alternate part for P/N 400-274 (standard P/N AN7-35). These bolts attach the drag link to the nose gear trunnion on Piper Model PA-34-200 airplanes. Piper did not include an ALS revision for the P/N 693-215 (standard P/N NAS6207-50D) bolt to establish the same life limit as the P/N 400-274 (AN7-35). If bolt P/N 693-215 (standard P/N NAS6207-50D) that attaches the drag link to the nose gear trunnion remains in service beyond its fatigue life, failure of the nose landing gear could occur, which could result in loss of airplane control during take-off, landing, or taxi operations.

In the NPRM, the FAA proposed to require establishing a 500-hour life limit for bolt P/N 693-215 and P/N NAS6207-50D. The FAA is issuing this AD to address the unsafe condition on these products.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received comments from two individual commenters. The following presents the comments received on the NPRM and the FAA's response.

One individual supported the NPRM without change.

Another individual requested the FAA revise the proposed AD by requiring

different assembly procedures and hardware as terminating action. The commenter stated that failure of the bolt results from the bolts not being tightened properly or loosening up in service. The commenter noted that this can be corrected with improved maintenance instructions to achieve the proper torque and hardware (thinner washers, a longer bushing, or a slightly longer bolt, for example) to provide sufficient lateral clearance on the bushing to avoid binding.

The FAA disagrees with the commenter's suggestion. This AD is not addressing potential failure of the bolt through maintenance practices but instead addresses the life limit for the subject bolt, which is part of the aircraft's type design. The life limit was inadvertently omitted from the ALS, and this AD simply corrects that omission. To the extent the commenter requested a terminating action, this request is unnecessary as this AD only requires a one-time change to the aircraft maintenance records.

The FAA did not change this AD based on this comment.

## **Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting the AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

## **Related Service Information**

The FAA reviewed Piper Seneca Service Manual, Airworthiness Limitations, 753-817, page 1-1, dated November 30, 2019. This service information specifies the life limits of the P/N 693-215 (standard P/N NAS6207-50D) bolt that attaches the drag link to the nose gear trunnion.

## **ADs Mandating Airworthiness Limitations**

The FAA has previously mandated airworthiness limitations by issuing ADs that require revising the ALS of the existing maintenance manual or instructions for continued airworthiness to incorporate new or revised inspections and life limits. This AD, however, requires incorporating new or revised inspections and life limits into the maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2) for your airplane. The FAA does not intend this as a substantive change. Requiring incorporation of the

new ALS requirements into the maintenance records, rather than requiring individual repetitive inspections and replacements, allows operators to record AD compliance once after updating the maintenance records, rather than recording compliance after every inspection and part replacement.

### **Costs of Compliance**

The FAA estimates that this AD affects 187 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Cost per airplane</b>	<b>Cost on U.S. operators</b>
Revise the Airworthiness Limitations	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$15,895

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

#### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2022-09-13 Piper Aircraft, Inc.:** Amendment 39-22033; Docket No. FAA-2022-0022; Project Identifier AD-2020-01264-A.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Piper Aircraft, Inc. Model PA-34-200 airplanes, serial numbers 34-7250001 through 34-7450220, certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code 3220, Nose/Tail Landing Gear.

#### **(e) Unsafe Condition**

This AD was prompted by the determination that the life limit for alternate bolts that attach the drag link to the nose gear were not included as airworthiness limitations. The FAA is issuing this AD to establish a life limit on bolt part numbers 693-215 and

NAS6207-50D that attach the drag link to the nose gear trunnion. The unsafe condition, if not addressed, could result in failure of the nose landing gear and lead to loss of airplane control during take-off, landing, or taxi operations.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Actions**

(1) Within 90 days after the effective date of this AD, incorporate into the maintenance records required by 14 CFR 91.417(a)(2) or 135.439(a)(2) for your airplane a life limit of 500 hours for bolt part numbers 693-215 and NAS6207-50D.

Note to paragraph (g)(1): Piper Seneca Service Manual, Airworthiness Limitations, 753-817, page 1-1, dated November 30, 2019, contains the life limit in paragraph (g)(1) of this AD.

(2) Thereafter, except as provided in paragraph (h)(1) of this AD, no alternative replacement times may be approved for these bolts.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(i) Related Information**

(1) For more information about this AD, contact Fred Caplan, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5507; email: frederick.n.caplan@faa.gov.

(2) For service information identified in this AD that is not incorporated by reference, contact Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, FL 32960; phone:

(772) 299-2141; website: <https://www.piper.com>. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

**(j) Material Incorporated by Reference**

None.

Issued on April 21, 2022.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2022-08852 Filed: 4/25/2022 8:45 am; Publication Date: 4/26/2022]